

# THE DER WEEKLY

[www.eren.doe.gov/der](http://www.eren.doe.gov/der)

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August 3, 2001

## Industry News

### Coactive Networks Provides DG Solutions

[Coactive Networks](#), a corporation that connects devices, appliances, and computers to the Internet, and [DTE Energy Technologies](#), a company offering distributed generation products and services, have entered an agreement to provide *energy/now*<sup>TM</sup> services that offer central monitoring and communications networks of distributed generation equipment. Operators will be able to activate, schedule, and adjust the load response of their equipment via the Internet. The product was designed to help increase reliability and conservation while reducing costs.

*Energy Central Daily Electric Power News, and Coactive and DTE Press Releases, August 1*



### Avista Labs Introduces Hydrogen Sensor

[Avista Labs](#), a fuel cell components and distributed power systems developer, has introduced a hydrogen sensor for fuel cell developers and other hydrogen users. According to Avista Labs, the device enables faster system start-up times, reduces the need for routine calibration, is highly resistant to potential software errors and logic failures, and provides greater resistance to "poisoning." The product also features a self-monitoring function that alerts the user when the sensor is not fully operational. It has received recognition from Underwriters Laboratories, Inc., under UL standard 2075, which represents the accepted safety standard for gas and vapor detectors and sensors.

*Fuel Cells Today, July 31; Avista Labs Press Release, July 27*

### Aeromax Shipping New Wind Turbine

[Aeromax Corporation](#), the distributor of Aeromag small wind turbine systems, announced that it is shipping a new Land Wind Turbine Generator, the [Aeromag Lakota](#). The battery-charging turbine employs a carbon fiber blade technology, is rated 900 watts of power output at 28.8 mph, and can be retrofitted on existing turbines. It is available in 12, 24, and 48 volt configurations.

*Aeromax Press Release, July 30*



Interested in helping your metropolitan area plan a sustainable energy future?  
Read Power Crunch,  
The DER Weekly Feature on page 2.

### City Government Plans Energy Self-Sufficiency

The City of Vallejo, California, is planning a new program to make the city government energy self-sufficient. City officials are in the process of contracting businesses to construct wind, solar, and microturbine systems that would generate approximately 10 MW of electricity a year, enough to power all the city offices. The Vallejo City Council tentatively approved the project in late June and hopes to eventually extend the program to the city's businesses and households. Vallejo's electricity and natural gas contract will expire in December, and without a new plan, the city estimates that its power bill would increase from 9.2 cents per kW hour to 20 cents per kW hour.

*San Francisco Chronicle, July 6*

### Texaco to Install PV System in Oil Field

[Texaco, Inc.](#), and [Bekaert ECD Solar Systems LLC](#), an affiliate of [United Solar Systems Corporation](#), have signed an agreement to design and install a photovoltaic system in a Texaco oil field in California. The companies expect completion of the project within 18 months; the first phase will provide a 400-kW system, and Texaco has the option to expand the system to deliver up to 1 MW of power. The California Energy Commission has approved a \$2.5 million buydown through its Emerging Renewables Buydown Program, and the California Public Utilities Commission will process a buydown application for an additional \$2 million.

*PR Newswire, July 31*

### Ballard Testing 10-kW Stationary Fuel Cell

Ballard Generation Systems, a subsidiary of [Ballard Power Systems](#), has begun testing of its 10-kW natural gas-powered stationary fuel cell. It is being designed for backup, light industrial, and standby applications for telecommunications and other purposes. Testing will continue through the end of this year, and according to the company, will lead to the development of the next generation of this product.

*Ballard News Release, July 31*

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Target.com now sells Bergey XL.1 wind turbines for residential and small business applications.\*

## Power Crunch: The DER Weekly Feature

### Energizing America's Cities: A Competition on Metropolitan Energy Design

In the decades ahead, who will make the important decisions about energy, the environment, and quality of life? Will growth in your metropolitan area be managed effectively? Or, will your region suffer through energy price hikes, brownouts, gridlock, sprawl, and ozone alerts?

Everyone benefits when thorough and thoughtful planning results in a sustainable future for your metropolitan region. And now, you have the opportunity to let the world know what your city or metropolitan area is planning for its future growth to create a sustainable energy future.

The Gas Technology Institute, in cooperation with the U.S. Department of Energy and the energy industry, is conducting the first-ever U.S. Competition on Metropolitan Energy Design. Based on the theme, *Energizing America's Cities*, the competition will identify the most effective and creative plans to meet growing energy needs in our cities and metropolitan areas. The goal is to uncover the most creative plans and solutions from metropolitan areas across the United States regarding electricity production, alternative transportation fuels, future technologies, energy efficiency, and renewables.

Eight of the best metropolitan energy designs, as chosen by a panel of energy experts, will be presented by their authors at the "Energizing America's Cities" conference on May 30th and 31st, 2002. The conference will also include panel discussions and information regarding electricity production, energy efficiency and renewables, alternative fuels, and future technologies. Additionally, the winning submittal will be announced at the conference.



The winning team will represent the United States at an international competition for Sustainable Urban System Designs, in Tokyo, Japan, in June 2003, as part of the 22nd World Gas Conference. Resources will be provided to help the U.S. team prepare for the event, at which teams from seven other countries will share their long-term (100-year) energy and environmental plans for their selected cities and regions.

For participation guidelines and more information, contact Dan Lefevers at [dan.lefevers@gastechnology.org](mailto:dan.lefevers@gastechnology.org) or 847/768-0877.

## Policy News

### House Passes SAFE Act

In the early morning hours of August 2, the U.S. House of Representatives passed the SAFE Act (H.R. 4), the energy bill supported by President Bush. The bill covers many energy issues, including sections relating to distributed energy resources. The bill would require:

- Federal agencies to review their regulations and standards to **identify barriers** to market entry for emerging energy efficient technologies including **fuel cells, combined heat and power, and distributed generation**
- The Secretary of Energy to deliver a **hybrid systems** strategy to Congress one year after enactment, develop and implement an R&D program to improve **reliability** and environmental responsibility in **data centers and server farms**, and establish a grants program for the development of **small-scale combined heat and power**
- The authorization of the Robert S. Walker and George E. Brown, Jr. **Hydrogen Energy Act of 2001**
- The Secretary of Energy to develop and implement an R&D program to ensure the reliability, efficiency, and

environmental integrity of the electrical transmission system through integration of **high temperature superconductivity, advanced transmission materials, power electronics**, and other technologies

- The Secretary of Energy to conduct a program that would focus on RD&D of **proton exchange membrane fuel cells**
- The extension and expansion of tax credits for renewable energy, including **solar, biomass, stationary fuel cells**, and **combined heat and power**

<http://thomas.loc.gov>

### Nevada Adopts Backup Generator Rules

On July 26, the [Nevada Public Utilities Commission](#) adopted rules that standardize utilities' use of backup generators. Critics say the regulations are too restrictive, claiming they do not encourage businesses to connect their generators to the electric grid, and that the standards are more restrictive than typical requirements for much larger power plants. Under the program, Nevada Power may purchase electricity from the generators at 50 percent of the market price two days before the company needs the power.

[Las Vegas Review-Journal](#), July 27

(Continued on page 3)

## Hawaii Governor Signs Hydrogen Bill

Hawaii Governor Benjamin Cayetano has signed Senate Bill 1435 into law, which establishes a hydrogen public/private partnership within the state's Department of Business, Economic Development. The legislation appropriates \$200,000 (with matching requirements) for fiscal year 2001-2002 out of a special land and development fund to support hydrogen research and development efforts. The law will sunset July 1, 2006.

*Fuel Cell Connection, July 2001; [Hawaii State Legislature Web Site](#)*

## DOE News

### DOE and UNLV Donate Solar Unit to School

The U.S. Department of Energy (DOE) and the University of Nevada-Las Vegas (UNLV) donated a portable solar energy generator system to the Clark County School District on July 30. The unit has the capacity to generate up to 700 watts of power and store up to 10 kW hours. Professors from UNLV offered to work with district teachers to create lesson plans on solar energy. The unit was designed and constructed as part of a two-year project with a total budget of \$120,000.

*[Las Vegas Review-Journal, July 31](#)*

### ACEEE Summer Study on Energy Efficiency

On July 24-27, nearly 250 energy professionals attended the 2001 American Council for an Energy Efficient Economy (ACEEE) Summer Study on Energy Efficiency in Industry in Tarrytown, New York. With seventy-three peer-reviewed papers presented by participants from around the world, the theme for the 5<sup>th</sup> biennial conference was "Increasing Productivity Through Energy Efficiency." Attendees included energy decision-makers from industry, equipment manufacturers, government policymakers, electric utility staff, energy consultants, leading industrial energy researchers, and academics.

This year's ACEEE Summer Study Co-Chairs were Michael Muller from Rutgers University, and Ernst Worrell of

## By the Numbers

- 58 percent of people surveyed that believe energy efficiency is more important than cost, brand, or color when choosing appliances
- 20 approximate percent of people who say their appliances are energy efficient
- 84 percent of people surveyed who claim they would pay more for compact fluorescent light bulbs
- 90 percent of people who still use incandescent light bulbs



*Source: Lowe's Home Improvement Warehouse Survey, cited in [Popular Science, August 2001](#)*

Lawrence Berkeley National Laboratory. Focusing on the distributed generation and combined heat and power (CHP) perspective of the conference, Ernst and Michael commented that CHP in a deregulated market provides an excellent opportunity to increase energy efficiency, productivity, and reliability of production facilities.

Merrill Smith, Office of Distributed Energy Resources, served as a Panel Leader for Distributed Power and CHP. Some presentation highlights included "Making CHP Work in Today's Market," "High Temperature Reciprocating Engines: A Key to Cost Effective CHP," "System Implications of Distributed Generation: Economic and Environmental Externalities," and "Industrial Applications for Fuel Cells."

Proceedings and additional conference information can be obtained from ACEEE's web site at [www.aceee.org](http://www.aceee.org).

## Regional Office News

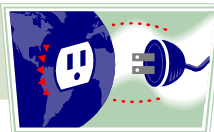
### ENERGY STAR® Recognizes Builders of Most Energy Efficient Homes in Colorado

The Denver Regional Office and E-Star Colorado participated in an ENERGY STAR® for Homes awards ceremony recognizing Colorado home builders for constructing the most energy-efficient new homes in the state since the start of 2000. The "Energy Efficient Homes for the New Millennium" event occurred on July 23 and July 24 in Pagosa Springs, and Colorado Springs, Colorado.

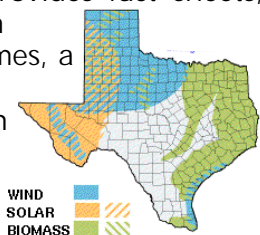
Winners represent three different types of homes: custom, production, and non-profit. Each winner was chosen from five different regions in Colorado and include: McStain Enterprises, Kurowski Development, Habitat for Humanity of Metro Denver, Lifestyle Homes, Classic Custom, Omega Homes, Tierra Concrete Homes, Upper Arkansas Council of Governments, Colorado Dream Homes, and Balanced Construction.

ENERGY STAR® for Homes is a national voluntary program that develops partnerships with the home building industry to construct homes that use at least 30 percent less energy than required by the 1993 Model Energy Code.

## What's on the Web



The Texas State Energy Conservation Office maintains a renewable energy Web site, [www.InfinitePower.org](http://www.InfinitePower.org), that provides fact sheets, lesson plans for teachers, tips on using renewable energy in homes, a guide to electric choice, a personal energy consumption calculator, and more. It also maps the state's distributed Renewable energy potential.



*The turbine features a start-up wind speed of 6.7 mph, a rated wind speed of 24.6 mph, and a rated power of 1000 watts.\**

# Calendar of Events

## AUGUST 2001

7-8	Natural Gas/Renewable Energy Hybrids Workshop	Morgantown, WV	joan.barbish@netl.gov
11-15	NCSL Annual Meeting and Exhibition	San Antonio, TX	<a href="http://www.ncsl.org">www.ncsl.org</a>
21-22	Natural Gas/Renewable Energy Hybrids Workshop	Golden, CO	barbara_ferris@nrel.gov
21-24	International Energy Program Evaluation Conference	Salt Lake City, UT	608-835-6880; marymcc@tds.net
29-30	Integrated Energy Efficiency Conference and Facilities Management & Maintenance Expo	Cleveland, OH	<a href="http://www.aeecenter.org">www.aeecenter.org</a>
29-Sep. 3	IEEC Integrated Energy Efficiency Congress	Cleveland, OH	Sponsored in part by FEMP; <a href="http://www.aeecenter.org">www.aeecenter.org</a>

## SEPTEMBER 2001

9-12	Microgeneration to Powerparks: Supply options and regulatory challenges	Troy, MI	Great Lakes Renewable Energy Assn. <a href="http://www.glrea.org">www.glrea.org</a>
9-14	6th International Conference on Carbon Dioxide Utilization	Breckenridge, CO	Barbara Ferris, 303-275-3781; <a href="http://www.nrel.gov/iccduvi/">www.nrel.gov/iccduvi/</a>
10-11	Energy Trading in New Economy	New Orleans, LA	<a href="http://www.eyeforeenergy.com/eeo2">www.eyeforeenergy.com/eeo2</a>
10-12	Electricity Transmission 2001	Arlington, VA	<a href="http://www.iir-ny.com">www.iir-ny.com</a>
10-12	Interconnecting DG to Utility Distribution Systems	Madison, WI	University of Wisconsin-Madison, College of Engineering (800) 462-0876
10-13	2001 Environmental Innovations Summit	Washington, DC	dunn@performancweb.org, 703-519-6270
11-13	7th Grove Fuel Cell Symposium	London, UK	<a href="http://www.grovefuelcell.com">www.grovefuelcell.com</a>
16-19	NASEO Annual Meeting	Portland, ME	<a href="http://www.naseo.org/events/annual/default.htm">www.naseo.org/events/annual/default.htm</a>
17-21	5 <sup>th</sup> Biomass Confer. of the Americas	Orlando, FL	<a href="http://www.fsec.ucf.edu/bioam">www.fsec.ucf.edu/bioam</a> ; dee_scheaffer@nrel.gov
20-21	ISO Technology Conference—Building the Electric Energy Industry Market	Washington, DC	<a href="http://www.isotechcon.com">www.isotechcon.com</a>
20-21	Energy Investors Summit	San Francisco, CA	<a href="http://www.srinstitute.com/cr216">www.srinstitute.com/cr216</a>
24-25	Distributed Generation Conference	Denver, CO	<a href="http://www.cbinet.com">www.cbinet.com</a>
24-26	Powering the Future: New Strategies & Solutions for Deploying DP in Mktplace	Chicago, IL	<a href="http://www.intertechusa.com">www.intertechusa.com</a>
24-26	Conservation or Crisis: A Northwest Choice	Portland, OR	<a href="http://www.bpa.gov/Energy/N/news/crisis.shtml">www.bpa.gov/Energy/N/news/crisis.shtml</a>
30 – Oct. 5	UPEX'01: The Photovoltaic Experience Conference & Expo	Sacramento, CA	Jjudd@ttcorp.com; hosted by Sacramento Municipal Utility District; includes distributed energy technologies workshop

## OCTOBER 2001

2-3	Midwest Electrical Conf. and Expo	Indianapolis, IN	<a href="http://www.electricleagueindiana.org/expo2001/index.htm">www.electricleagueindiana.org/expo2001/index.htm</a>
4-5	Distributed Generation Seminar	Boston, MA	<a href="http://www.aeecenter.org">www.aeecenter.org</a>
7-10	APPA Telecommunications Wkshp.	Seattle, WA	<a href="http://www.appanet.org">www.appanet.org</a> ; Bethany Luna (202) 467-2993
10-11	Fuel Cell Dynamics: Reality, Not Hype	New York, NY	<a href="http://www.alliedworld.com">www.alliedworld.com</a>
14-17	National Center for Photovoltaics Program Review	Lakewood, CO	barbara_ferris@nrel.gov, 303-275-3781

# Calendar of Events

## OCTOBER 2001

16-17	CHP Roadmap Meeting	Baltimore, MD	John Jimison, johnj@bcjlaw.com
16-17	Two-day Seminar on Materials for Corrosive Applications	Wilmington, DE	Rick Sutherlin, (541) 967-6924
16-17	Energy & Environmental Technologies Conference	Atlantic City, NJ	<a href="http://www.eetech.org">www.eetech.org</a>
22-23	Fuel Cells for Portable Devices	San Francisco, CA	<a href="http://www.f-cellsnetwork.com/NA-1660-01">www.f-cellsnetwork.com/NA-1660-01</a>
24-26	World Energy Engineering Congress	Atlanta, GA	<a href="http://www.agcc.org">www.agcc.org</a> (includes CHP Expo <a href="http://www.aeecenter.org">www.aeecenter.org</a> )
24-27	Excellence in Building 2001	Orlando, FL	<a href="http://www.eeba.org/conference">www.eeba.org/conference</a>
28-Nov. 2	2001 IEEE/PES Transmission and Distribution Conference and Expo	Atlanta, GA	<a href="http://www.ieeet-d.org">www.ieeet-d.org</a>
29-30	Reliability-Focused Energy Efficiency Conference: Lessons Learned in 2001	Berkeley, CA	<a href="http://www.aceee.org">www.aceee.org</a>

## NOVEMBER 2001

1-2	3rd Int'l Symposium on DG	San Diego, CA	<a href="http://www.cader.org">www.cader.org</a>
1-4	World Congress for a Hydrogen Economy	Denver, CO	<a href="http://www.hydrogennow.org">www.hydrogennow.org</a>
6	NAESCO DG Conference	Miami, FL	<a href="http://www.naesco.org/conference.htm">www.naesco.org/conference.htm</a>
7-9	NAESCO 18th Annual Conference	Miami, FL	<a href="http://www.naesco.org/conference.htm">www.naesco.org/conference.htm</a>
8-9	DG Strategies & On-site Power Applications for Fuel Cells	Atlanta, GA	<a href="http://www.dist-gen.com">www.dist-gen.com</a>
11-14	113th NARUC Annual Convention	Philadelphia, PA	<a href="http://www.naruc.org">www.naruc.org</a>
12-14	Fuel Cells for Stationary, Automotive and Portable Apps.	Fort Lauderdale, FL	Florida Educational Seminars, (561) 367-0193
27-28	Business for Fuel Cells for Stationary Applications	Brussels, Belgium	<a href="http://www.eyeforfuelcells.com">www.eyeforfuelcells.com</a>
28-30	The Power to Choose: Creating and Expanded DER Industry	Washington, DC	<a href="mailto:cs@energeticsinc.com">cs@energeticsinc.com</a>

## DECEMBER 2001

3-4	4th Business Case for Opportunity and Investment in Fuel Cells	Miami, FL	<a href="http://www.cbinet.com">www.cbinet.com</a>
5-7	Fourth Annual Interactive Energy 2001 Conference	Houston, TX	<a href="http://www.interactiveenergy.com/2001">www.interactiveenergy.com/2001</a>
11-13	Power-Gen International	Las Vegas, NV	<a href="http://www.pennwellevents.com">www.pennwellevents.com</a>

## JANUARY 2002

14-15	Material Technologies for Fuel Cells and Power Electronics	Cocoa Beach, FL	<a href="http://www.ceramics.org/meetings/ECD2002/expo.asp">www.ceramics.org/meetings/ECD2002/expo.asp</a>
29-Feb.1	Reducing Your Energy Costs Conference and Exhibit	New Orleans, LA	Stuart Steller, 781-939-2411, s.steller@cbinet.com

## FEBRUARY 2002

27-Mar 1	DistribuTECH	Miami Beach, FL	<a href="http://www.pennwellevents.com">www.pennwellevents.com</a>
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## MARCH 2002

17-21	EPRI's 7th Distributed Resources Conference and Expo	Dallas, TX	lgoldie@epri.com
19-21	Electric Power 2002	St. Louis, MO	<a href="http://www.electricpowerexpo.com">www.electricpowerexpo.com</a>

\*Source: Business Wire, July 30; [Target.com](http://Target.com)